

responding to rejections based upon prior art, filed in this application on March 2, 2005. The issue then as well as now is the claiming of a countermeasure system incorporating a launch tube having a longitudinal guide for the launching of a cartridge having zero rotation and means (as a canard) for adjusting pitch after launch. Such a system is unknown in missile technology

Applicant respectfully repeats its arguments in respect of the amended claims to distinguish its invention from the references cited by the Examiner and asks that the amendments be entered.

In the Specification

With respect to the objection to the Specification, as not providing proper antecedent basis for the claimed subject matter, Applicant fails to understand the Examiner's position. In respect of "zero-twist rifling", Applicant respectfully directs the Examiner to page 23 and the paragraph beginning at line 1 and continuing to line 13 where the term "zero-twist rifling" and the components thereof are described. Further reference to the Specification beginning at page 20, line 7 through to page 23, line 13 discusses the structure, function and action of guide key 76 and keyway 68 in establishing and restricting rotation of the cartridge 50 during the launch cycle. On page 23, at line 11, the elements for preventing rotation of the cartridge 50 are summarized as "zero-twist rifling". The term "guide means" as related to the mechanism for providing the non-rotational or zero-twist rifling in the sections of the Specification indicated above. The elements of guide keys 76 and keyways 68 are consistently used throughout the Specification in respect of the means in which the cartridge and launch tube cooperate to launch the cartridge without axial rotation. It is Applicant's view that such description will be uniformly interpreted by those skilled in the art as "guide means". There are no other corresponding terms in the Specification which would provoke a different interpretation.

As to the term "means for rotating", the Specification beginning at page 13, line 12 through to page 14, line 3 describes the servo motor 32, launch tube 24 and base 22 and outer tube 25 in respect of the means for rotation of the launch tube. Further at page 24, line 3 through to page 26, line 13, the Specification describes the function of the rotation of the launch tube and setting of the azimuth of the tube and cartridge orientation for the course of the launch. Applicant's invention is novel in that the cartridge (projectile) is launched out of a vertical tube, with a predetermined built-in

pitch from the vertical to a specific course, as determined by the azimuth set by the means for rotating (e.g., servo motor).

In respect of the “propulsion means”, the Specification recites the traditional means of firing, or providing motion on the intended course of projectiles - page 15, lines 16 and 17 identify rocket motor, impulse assembly and mortar assembly as typical motors for firing the cartridge. Those skilled in the art certainly are aware of such, as well as other propulsion mechanism, and further description would be redundant.

In respect of the term “canard means”, Applicant appreciates that the term may be redundant of “canards”, since that term is understood by those skilled in the art as a forward mounted means for a missile or aircraft for controlling pitch. In that respect, Applicant is deleting the word “means” from claims 44 and 48.

The remaining objection is in respect of the term “means for setting the azimuth” which appears in claim 45. In that claim 44 is being amended to provide for the setting of the azimuth by rotation of the launch tube, claim 45 is being cancelled.

Applicant herein amends the claims as reflected in the following scanable format. by amending claim 44, 47 - 49 and 50 (47 and 49 to be dependent upon claim 44; 50 to be dependent upon claim 49) and canceling claim 45. Claim 44 is amended to better distinguish the invention from the prior art.